

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P274326

Luminaire Tested: **LD4B15DE010W2N2765 EU4B1020W2N902765 4LBSW0H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274326
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-13)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B15DE010W2N2765 EU4B1020W2N902765 4LBSW0H
Description: PORTFOLIO 4" W2N RN DOWNLIGHT, SINGLE WALLWASH WITH HAZE FINISH
Light Source: W2N 2700K-6500K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1199.3 lumens
Efficiency: N/A
Efficacy: 54.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.38' x H: 0')
CIE Type: Direct

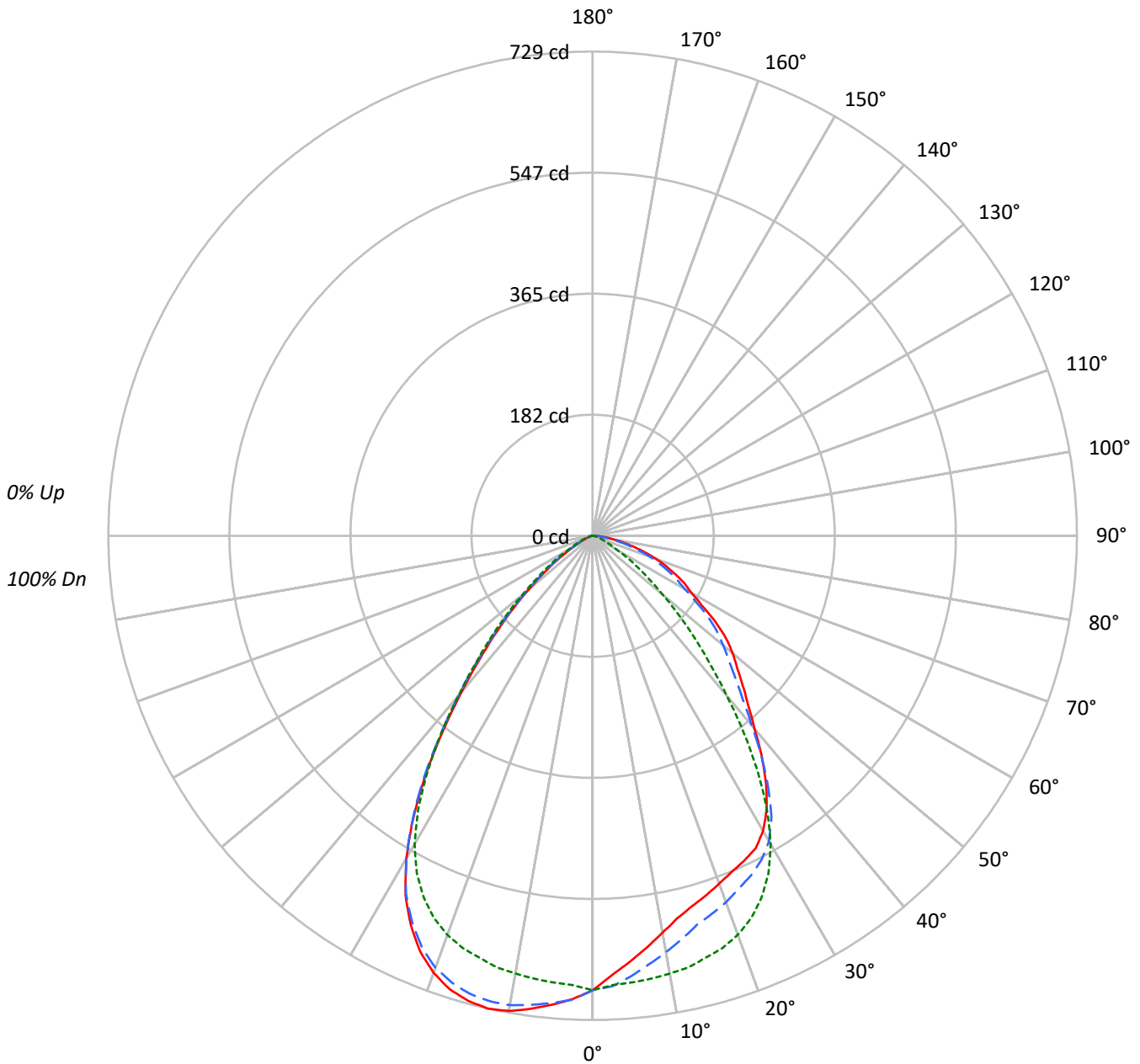
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P274326

CATALOG NUMBER: LD4B15DE010W2N2765 EU4B1020W2N902765 4LBSW0H

Luminous Intensity Polar Plot





TEST NUMBER: P274326

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | | 10 | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 111 | 108 | 104 | 101 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | | | 89 | | | |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | | | | | 79 | | | |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 75 | 83 | 78 | 74 | 81 | 76 | 73 | 78 | 75 | 72 | 70 | | | | | 70 | | | |
| 4 | 90 | 80 | 72 | 67 | 88 | 78 | 72 | 66 | 76 | 70 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 62 | | | | | 62 | | | |
| 5 | 83 | 73 | 65 | 60 | 82 | 72 | 65 | 59 | 70 | 63 | 59 | 68 | 62 | 58 | 66 | 61 | 58 | 56 | | | | | 56 | | | |
| 6 | 78 | 67 | 59 | 53 | 76 | 66 | 59 | 53 | 64 | 58 | 53 | 62 | 57 | 52 | 61 | 56 | 52 | 50 | | | | | 50 | | | |
| 7 | 73 | 61 | 54 | 48 | 71 | 61 | 53 | 48 | 59 | 53 | 48 | 58 | 52 | 48 | 56 | 51 | 47 | 46 | | | | | 46 | | | |
| 8 | 68 | 57 | 49 | 44 | 67 | 56 | 49 | 44 | 55 | 48 | 44 | 54 | 48 | 43 | 52 | 47 | 43 | 42 | | | | | 42 | | | |
| 9 | 64 | 52 | 45 | 40 | 63 | 52 | 45 | 40 | 51 | 44 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 38 | | | | | 38 | | | |
| 10 | 61 | 49 | 42 | 37 | 59 | 48 | 42 | 37 | 47 | 41 | 37 | 47 | 41 | 37 | 46 | 40 | 37 | 35 | | | | | 35 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 66681 | 66681 | 66681 |
| 5° | 62964 | 66065 | 69342 |
| 10° | 60030 | 66225 | 71896 |
| 15° | 58267 | 66359 | 73119 |
| 20° | 57789 | 66293 | 72599 |
| 25° | 58025 | 64660 | 69585 |
| 30° | 57742 | 60319 | 63098 |
| 35° | 54121 | 51504 | 52027 |
| 40° | 48230 | 39935 | 39032 |
| 45° | 44104 | 29771 | 27951 |
| 50° | 41710 | 20847 | 18846 |
| 55° | 38349 | 14086 | 11843 |
| 60° | 33506 | 8245 | 6530 |
| 65° | 31708 | 5281 | 3667 |
| 70° | 28894 | 3761 | 2251 |
| 75° | 23911 | 2673 | 1657 |
| 80° | 18801 | 1459 | 1010 |
| 85° | 16773 | 1006 | 0 |



TEST NUMBER: P274326

CATALOG NUMBER: LD4B15DE010W2N2765 EU4B1020W2N902765 4LBSW0H

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 64.6 | 5.4 |
| 10°-20° | 185.4 | 15.5 |
| 20°-30° | 274.9 | 22.9 |
| 30°-40° | 275.3 | 23.0 |
| 40°-50° | 192.4 | 16.0 |
| 50°-60° | 114.5 | 9.5 |
| 60°-70° | 59.7 | 5.0 |
| 70°-80° | 26.6 | 2.2 |
| 80°-90° | 5.8 | 0.5 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 525.0 | 43.8 |
| 0°-40° | 800.3 | 66.7 |
| 0°-60° | 1107.2 | 92.3 |
| 0°-90° | 1199.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1199.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0° | 684 | 684 | 684 | 684 | 684 | |
| 5° | 644 | 666 | 675 | 706 | 709 | 60 |
| 15° | 578 | 607 | 658 | 714 | 725 | 164 |
| 25° | 540 | 564 | 601 | 643 | 647 | 249 |
| 35° | 455 | 460 | 433 | 441 | 437 | 282 |
| 45° | 320 | 304 | 216 | 209 | 203 | 248 |
| 55° | 226 | 212 | 83 | 72 | 70 | 200 |
| 65° | 138 | 126 | 23 | 17 | 16 | 136 |
| 75° | 64 | 56 | 7 | 4 | 4 | 69 |
| 85° | 15 | 12 | 1 | 1 | 0 | 17 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P274326

CATALOG NUMBER: LD4B15DE010W2N2765 EU4B1020W2N902765 4LBSW0H

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 |
| 2.5° | 662.1 | 670.1 | 662.1 | 664.8 | 675.3 | 665.6 | 670.9 | 670.9 | 668.3 | 674.5 | 678.9 |
| 5° | 643.6 | 651.5 | 643.6 | 647.1 | 658.6 | 648.9 | 655.1 | 653.3 | 654.2 | 659.5 | 665.6 |
| 7.5° | 625.1 | 631.3 | 624.2 | 628.6 | 639.2 | 631.3 | 636.6 | 636.6 | 637.4 | 645.4 | 650.7 |
| 10° | 606.6 | 611.9 | 606.6 | 610.1 | 621.6 | 614.5 | 618.0 | 618.9 | 621.6 | 628.6 | 636.6 |
| 12.5° | 589.8 | 594.2 | 588.9 | 594.2 | 603.9 | 596.9 | 601.3 | 602.2 | 604.8 | 612.7 | 621.6 |
| 15° | 577.5 | 581.9 | 576.6 | 581.0 | 589.8 | 584.5 | 588.1 | 589.8 | 591.6 | 598.6 | 606.6 |
| 17.5° | 567.8 | 571.3 | 566.9 | 572.2 | 579.2 | 573.1 | 578.4 | 578.4 | 581.0 | 588.1 | 596.9 |
| 20° | 557.2 | 560.7 | 557.2 | 561.6 | 569.5 | 564.3 | 568.7 | 568.7 | 571.3 | 579.2 | 587.2 |
| 22.5° | 547.5 | 549.3 | 547.5 | 551.0 | 559.0 | 554.6 | 557.2 | 558.1 | 560.7 | 567.8 | 574.8 |
| 25° | 539.6 | 543.1 | 541.3 | 544.9 | 550.2 | 545.7 | 548.4 | 549.3 | 551.9 | 558.1 | 564.3 |
| 27.5° | 530.8 | 532.5 | 530.8 | 535.2 | 539.6 | 536.0 | 538.7 | 537.8 | 539.6 | 544.9 | 550.2 |
| 30° | 513.1 | 514.9 | 514.9 | 517.5 | 521.1 | 519.3 | 521.9 | 519.3 | 521.1 | 525.5 | 530.8 |
| 32.5° | 487.6 | 488.4 | 489.3 | 492.0 | 494.6 | 492.0 | 493.7 | 493.7 | 493.7 | 497.3 | 500.8 |
| 35° | 454.9 | 456.7 | 455.8 | 457.6 | 460.2 | 459.3 | 459.3 | 458.5 | 456.7 | 458.5 | 460.2 |
| 37.5° | 417.9 | 415.3 | 415.3 | 417.9 | 419.7 | 416.1 | 417.9 | 416.1 | 416.1 | 417.0 | 417.0 |
| 40° | 379.1 | 376.5 | 379.1 | 380.0 | 380.9 | 379.1 | 378.2 | 376.5 | 373.8 | 374.7 | 372.9 |
| 42.5° | 346.5 | 344.7 | 345.6 | 345.6 | 346.5 | 344.7 | 345.6 | 342.1 | 339.4 | 337.7 | 335.0 |
| 45° | 320.0 | 317.4 | 320.0 | 318.3 | 318.3 | 317.4 | 316.5 | 314.8 | 311.2 | 308.6 | 304.2 |
| 47.5° | 295.4 | 295.4 | 296.2 | 296.2 | 296.2 | 294.5 | 294.5 | 290.9 | 287.4 | 283.9 | 277.7 |
| 50° | 275.1 | 273.3 | 276.8 | 276.8 | 274.2 | 273.3 | 274.2 | 269.8 | 267.1 | 262.7 | 256.6 |
| 52.5° | 253.0 | 253.0 | 253.9 | 253.9 | 253.0 | 251.3 | 252.2 | 248.6 | 246.0 | 241.6 | 235.4 |
| 55° | 225.7 | 223.9 | 226.6 | 226.6 | 225.7 | 224.8 | 225.7 | 223.1 | 220.4 | 216.9 | 211.6 |
| 57.5° | 194.8 | 194.0 | 195.7 | 196.6 | 194.8 | 194.8 | 195.7 | 193.1 | 192.2 | 188.7 | 183.4 |
| 60° | 171.9 | 171.0 | 172.8 | 173.7 | 171.9 | 171.9 | 171.9 | 168.4 | 166.6 | 163.1 | 159.6 |
| 62.5° | 156.1 | 155.2 | 156.9 | 156.1 | 155.2 | 154.3 | 155.2 | 151.6 | 149.9 | 146.4 | 142.8 |
| 65° | 137.5 | 138.4 | 139.3 | 139.3 | 138.4 | 137.5 | 137.5 | 135.8 | 134.0 | 130.5 | 126.1 |
| 67.5° | 119.9 | 119.9 | 120.8 | 121.7 | 120.8 | 120.8 | 120.8 | 118.1 | 116.4 | 113.7 | 108.4 |
| 70° | 101.4 | 100.5 | 103.2 | 103.2 | 101.4 | 102.3 | 101.4 | 100.5 | 98.7 | 95.2 | 90.8 |
| 72.5° | 82.0 | 82.0 | 82.9 | 82.9 | 82.0 | 82.0 | 82.0 | 81.1 | 78.5 | 76.7 | 72.3 |
| 75° | 63.5 | 63.5 | 64.4 | 65.2 | 63.5 | 63.5 | 64.4 | 62.6 | 60.8 | 58.2 | 55.5 |
| 77.5° | 47.6 | 46.7 | 47.6 | 47.6 | 46.7 | 46.7 | 46.7 | 45.8 | 45.0 | 42.3 | 39.7 |
| 80° | 33.5 | 32.6 | 33.5 | 33.5 | 33.5 | 32.6 | 32.6 | 31.7 | 31.7 | 30.0 | 27.3 |
| 82.5° | 22.9 | 22.0 | 22.9 | 22.9 | 22.9 | 22.0 | 22.0 | 22.0 | 21.2 | 20.3 | 18.5 |
| 85° | 15.0 | 14.1 | 14.1 | 15.0 | 14.1 | 14.1 | 14.1 | 14.1 | 13.2 | 12.3 | 11.5 |
| 87.5° | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 6.2 | 6.2 | 6.2 | 5.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: LD4B15DE010W2N2765 EU4B1020W2N902765 4LBSW0H

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 |
| 2.5° | 675.3 | 673.6 | 678.9 | 677.1 | 678.0 | 673.6 | 680.6 | 677.1 | 681.5 | 677.1 | 685.9 |
| 5° | 663.9 | 662.1 | 670.1 | 669.2 | 670.1 | 666.5 | 674.5 | 673.6 | 678.9 | 675.3 | 685.0 |
| 7.5° | 651.5 | 649.8 | 658.6 | 659.5 | 661.2 | 657.7 | 668.3 | 668.3 | 673.6 | 672.7 | 683.3 |
| 10° | 637.4 | 638.3 | 647.1 | 648.9 | 652.4 | 650.7 | 660.4 | 663.0 | 670.1 | 669.2 | 682.4 |
| 12.5° | 624.2 | 624.2 | 635.7 | 639.2 | 641.8 | 641.0 | 652.4 | 655.9 | 663.9 | 665.6 | 678.0 |
| 15° | 611.0 | 611.9 | 622.4 | 627.7 | 631.3 | 630.4 | 642.7 | 647.1 | 656.8 | 657.7 | 672.7 |
| 17.5° | 600.4 | 599.5 | 611.0 | 615.4 | 620.7 | 619.8 | 633.0 | 638.3 | 648.0 | 650.7 | 664.8 |
| 20° | 591.6 | 590.7 | 601.3 | 606.6 | 610.1 | 609.2 | 622.4 | 628.6 | 637.4 | 639.2 | 653.3 |
| 22.5° | 581.0 | 579.2 | 589.8 | 594.2 | 597.8 | 596.9 | 608.3 | 612.7 | 621.6 | 623.3 | 636.6 |
| 25° | 568.7 | 566.9 | 576.6 | 579.2 | 581.9 | 580.1 | 589.8 | 592.5 | 599.5 | 601.3 | 614.5 |
| 27.5° | 554.6 | 550.2 | 558.1 | 558.1 | 559.8 | 557.2 | 564.3 | 566.9 | 573.1 | 573.1 | 585.4 |
| 30° | 532.5 | 526.3 | 530.8 | 529.9 | 530.8 | 527.2 | 531.6 | 532.5 | 536.9 | 536.0 | 544.9 |
| 32.5° | 501.7 | 492.8 | 495.5 | 492.8 | 490.2 | 484.9 | 490.2 | 488.4 | 492.0 | 488.4 | 496.4 |
| 35° | 459.3 | 450.5 | 449.6 | 446.1 | 443.5 | 439.1 | 439.1 | 434.7 | 435.5 | 432.9 | 438.2 |
| 37.5° | 413.5 | 402.0 | 400.3 | 393.2 | 388.8 | 383.5 | 383.5 | 380.0 | 375.6 | 373.8 | 378.2 |
| 40° | 368.5 | 356.2 | 351.8 | 340.3 | 335.9 | 330.6 | 327.1 | 322.7 | 320.9 | 313.9 | 317.4 |
| 42.5° | 329.7 | 316.5 | 306.8 | 294.5 | 290.1 | 282.1 | 276.8 | 271.5 | 268.9 | 261.0 | 264.5 |
| 45° | 297.1 | 281.2 | 270.7 | 254.8 | 248.6 | 239.8 | 231.9 | 225.7 | 219.5 | 216.0 | 214.2 |
| 47.5° | 269.8 | 253.0 | 238.9 | 221.3 | 211.6 | 203.7 | 193.1 | 186.9 | 179.0 | 174.6 | 171.9 |
| 50° | 246.9 | 228.3 | 212.5 | 192.2 | 182.5 | 173.7 | 161.3 | 151.6 | 144.6 | 137.5 | 135.8 |
| 52.5° | 226.6 | 207.2 | 189.6 | 166.6 | 155.2 | 144.6 | 131.4 | 120.8 | 114.6 | 106.7 | 105.8 |
| 55° | 202.8 | 186.0 | 166.6 | 142.8 | 131.4 | 120.8 | 106.7 | 96.1 | 88.2 | 82.9 | 81.1 |
| 57.5° | 177.2 | 161.3 | 142.8 | 119.0 | 107.6 | 96.1 | 82.9 | 73.2 | 66.1 | 61.7 | 60.8 |
| 60° | 153.4 | 138.4 | 120.8 | 97.0 | 85.5 | 75.8 | 61.7 | 52.0 | 45.8 | 42.3 | 40.6 |
| 62.5° | 135.8 | 121.7 | 104.9 | 82.9 | 72.3 | 62.6 | 49.4 | 40.6 | 35.3 | 31.7 | 30.0 |
| 65° | 119.0 | 104.9 | 89.9 | 69.7 | 60.8 | 52.0 | 39.7 | 31.7 | 26.4 | 22.9 | 21.2 |
| 67.5° | 101.4 | 89.0 | 74.9 | 58.2 | 49.4 | 42.3 | 31.7 | 24.7 | 20.3 | 17.6 | 15.9 |
| 70° | 83.8 | 72.3 | 60.8 | 46.7 | 40.6 | 33.5 | 24.7 | 19.4 | 15.0 | 13.2 | 11.5 |
| 72.5° | 66.1 | 57.3 | 47.6 | 36.1 | 30.9 | 26.4 | 19.4 | 14.1 | 11.5 | 9.7 | 7.9 |
| 75° | 49.4 | 43.2 | 35.3 | 27.3 | 22.9 | 19.4 | 14.1 | 10.6 | 8.8 | 7.1 | 6.2 |
| 77.5° | 35.3 | 30.0 | 24.7 | 18.5 | 16.8 | 14.1 | 9.7 | 7.9 | 6.2 | 4.4 | 3.5 |
| 80° | 23.8 | 21.2 | 16.8 | 13.2 | 10.6 | 9.7 | 7.1 | 5.3 | 3.5 | 2.6 | 2.6 |
| 82.5° | 15.9 | 13.2 | 10.6 | 7.9 | 7.1 | 6.2 | 4.4 | 3.5 | 2.6 | 1.8 | 1.8 |
| 85° | 9.7 | 7.9 | 6.2 | 4.4 | 4.4 | 3.5 | 2.6 | 1.8 | 0.9 | 0.9 | 0.9 |
| 87.5° | 4.4 | 3.5 | 2.6 | 1.8 | 1.8 | 0.9 | 0.9 | 0.9 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 |
| 2.5° | 693.0 | 687.7 | 684.2 | 688.6 | 690.3 | 687.7 | 690.3 | 694.7 | 699.2 | 700.0 | 687.7 |
| 5° | 693.9 | 688.6 | 686.8 | 692.1 | 693.0 | 692.1 | 694.7 | 700.9 | 706.2 | 708.0 | 695.6 |
| 7.5° | 693.9 | 690.3 | 689.5 | 695.6 | 696.5 | 695.6 | 700.0 | 707.1 | 712.4 | 715.9 | 703.6 |
| 10° | 692.1 | 690.3 | 691.2 | 696.5 | 698.3 | 698.3 | 704.4 | 712.4 | 717.7 | 721.2 | 708.8 |
| 12.5° | 689.5 | 689.5 | 689.5 | 695.6 | 697.4 | 698.3 | 703.6 | 714.1 | 717.7 | 723.0 | 710.6 |
| 15° | 685.0 | 685.0 | 685.0 | 691.2 | 693.9 | 693.9 | 700.0 | 709.7 | 714.1 | 719.4 | 707.1 |
| 17.5° | 677.1 | 677.1 | 678.0 | 683.3 | 685.9 | 685.9 | 692.1 | 702.7 | 705.3 | 711.5 | 699.2 |
| 20° | 665.6 | 665.6 | 666.5 | 671.8 | 674.5 | 672.7 | 680.6 | 689.5 | 692.1 | 697.4 | 685.0 |
| 22.5° | 648.9 | 648.9 | 648.9 | 654.2 | 655.9 | 655.1 | 663.0 | 670.9 | 670.9 | 678.0 | 664.8 |
| 25° | 624.2 | 626.0 | 624.2 | 629.5 | 631.3 | 630.4 | 637.4 | 644.5 | 642.7 | 650.7 | 637.4 |
| 27.5° | 594.2 | 593.4 | 593.4 | 597.8 | 597.8 | 596.9 | 602.2 | 610.1 | 608.3 | 613.6 | 601.3 |
| 30° | 552.8 | 555.4 | 551.0 | 557.2 | 554.6 | 552.8 | 556.3 | 563.4 | 560.7 | 565.1 | 555.4 |
| 32.5° | 505.2 | 501.7 | 501.7 | 501.7 | 503.4 | 499.0 | 502.5 | 506.1 | 503.4 | 507.8 | 497.3 |
| 35° | 442.6 | 443.5 | 440.8 | 441.7 | 442.6 | 437.3 | 440.8 | 444.4 | 440.8 | 443.5 | 433.8 |
| 37.5° | 380.0 | 380.9 | 374.7 | 378.2 | 374.7 | 372.9 | 376.5 | 378.2 | 374.7 | 377.3 | 366.8 |
| 40° | 317.4 | 315.6 | 314.8 | 314.8 | 315.6 | 311.2 | 313.9 | 316.5 | 313.9 | 315.6 | 305.9 |
| 42.5° | 262.7 | 261.9 | 260.1 | 261.0 | 258.3 | 257.4 | 258.3 | 261.0 | 258.3 | 260.1 | 253.0 |
| 45° | 215.1 | 213.4 | 210.7 | 211.6 | 211.6 | 207.2 | 209.8 | 211.6 | 209.0 | 209.8 | 203.7 |
| 47.5° | 171.0 | 168.4 | 168.4 | 167.5 | 167.5 | 165.8 | 168.4 | 167.5 | 164.9 | 166.6 | 160.5 |
| 50° | 133.1 | 131.4 | 131.4 | 131.4 | 131.4 | 128.7 | 129.6 | 131.4 | 128.7 | 128.7 | 125.2 |
| 52.5° | 104.0 | 101.4 | 99.6 | 99.6 | 99.6 | 98.7 | 98.7 | 99.6 | 97.0 | 97.0 | 96.1 |
| 55° | 78.5 | 77.6 | 74.9 | 74.9 | 74.9 | 72.3 | 73.2 | 73.2 | 72.3 | 72.3 | 69.7 |
| 57.5° | 58.2 | 55.5 | 53.8 | 53.8 | 52.0 | 52.0 | 51.1 | 52.0 | 50.3 | 50.3 | 48.5 |
| 60° | 38.8 | 37.0 | 36.1 | 35.3 | 35.3 | 34.4 | 35.3 | 34.4 | 34.4 | 33.5 | 32.6 |
| 62.5° | 28.2 | 26.4 | 24.7 | 24.7 | 24.7 | 23.8 | 23.8 | 23.8 | 23.8 | 23.8 | 22.9 |
| 65° | 20.3 | 18.5 | 18.5 | 17.6 | 17.6 | 16.8 | 16.8 | 16.8 | 16.8 | 16.8 | 15.9 |
| 67.5° | 14.1 | 13.2 | 12.3 | 12.3 | 12.3 | 12.3 | 12.3 | 12.3 | 11.5 | 11.5 | 11.5 |
| 70° | 10.6 | 9.7 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 7.9 | 8.8 | 8.8 | 7.9 |
| 72.5° | 7.1 | 7.1 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 |
| 75° | 5.3 | 5.3 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |
| 77.5° | 3.5 | 3.5 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 80° | 2.6 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 82.5° | 1.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 85° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P274326

CATALOG NUMBER: LD4B15DE010W2N2765 EU4B1020W2N902765 4LBSW0H

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0° | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 | 684.2 |
| 2.5° | 700.9 | 700.0 | 698.3 | 700.9 | 693.9 | 691.2 | 690.3 | 698.3 |
| 5° | 710.6 | 708.8 | 708.8 | 711.5 | 703.6 | 701.8 | 700.0 | 708.8 |
| 7.5° | 719.4 | 717.7 | 717.7 | 720.3 | 713.3 | 711.5 | 709.7 | 718.5 |
| 10° | 724.7 | 724.7 | 724.7 | 726.5 | 720.3 | 718.5 | 717.7 | 726.5 |
| 12.5° | 727.4 | 727.4 | 726.5 | 730.0 | 722.1 | 722.1 | 720.3 | 729.1 |
| 15° | 723.8 | 723.8 | 723.8 | 726.5 | 719.4 | 717.7 | 717.7 | 724.7 |
| 17.5° | 715.0 | 715.0 | 714.1 | 716.8 | 708.8 | 708.8 | 708.0 | 715.9 |
| 20° | 701.8 | 701.8 | 700.0 | 703.6 | 695.6 | 693.0 | 692.1 | 700.0 |
| 22.5° | 680.6 | 679.8 | 678.9 | 680.6 | 673.6 | 671.8 | 670.9 | 678.0 |
| 25° | 653.3 | 652.4 | 650.7 | 652.4 | 644.5 | 641.8 | 641.8 | 647.1 |
| 27.5° | 614.5 | 614.5 | 611.9 | 614.5 | 605.7 | 604.8 | 603.9 | 610.1 |
| 30° | 566.9 | 563.4 | 561.6 | 565.1 | 556.3 | 556.3 | 554.6 | 560.7 |
| 32.5° | 507.8 | 504.3 | 503.4 | 505.2 | 497.3 | 494.6 | 498.1 | 501.7 |
| 35° | 439.9 | 440.8 | 437.3 | 437.3 | 430.2 | 431.1 | 432.0 | 437.3 |
| 37.5° | 374.7 | 372.9 | 372.1 | 372.9 | 367.6 | 365.9 | 364.1 | 369.4 |
| 40° | 313.9 | 309.5 | 308.6 | 308.6 | 304.2 | 303.3 | 304.2 | 306.8 |
| 42.5° | 256.6 | 255.7 | 252.2 | 253.9 | 249.5 | 251.3 | 250.4 | 250.4 |
| 45° | 207.2 | 208.1 | 204.5 | 207.2 | 203.7 | 201.0 | 201.0 | 202.8 |
| 47.5° | 164.0 | 164.0 | 163.1 | 163.1 | 160.5 | 161.3 | 159.6 | 162.2 |
| 50° | 127.0 | 127.0 | 125.2 | 126.1 | 124.3 | 124.3 | 123.4 | 124.3 |
| 52.5° | 97.0 | 96.1 | 96.1 | 95.2 | 93.5 | 94.3 | 95.2 | 93.5 |
| 55° | 70.5 | 71.4 | 69.7 | 70.5 | 68.8 | 69.7 | 68.8 | 69.7 |
| 57.5° | 48.5 | 49.4 | 47.6 | 49.4 | 47.6 | 48.5 | 47.6 | 47.6 |
| 60° | 33.5 | 33.5 | 32.6 | 33.5 | 32.6 | 32.6 | 31.7 | 33.5 |
| 62.5° | 22.9 | 22.9 | 22.9 | 22.9 | 22.9 | 22.0 | 22.9 | 22.9 |
| 65° | 16.8 | 15.9 | 15.9 | 15.9 | 15.9 | 15.9 | 15.9 | 15.9 |
| 67.5° | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 |
| 70° | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 |
| 72.5° | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 |
| 75° | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |
| 77.5° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 80° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 82.5° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 85° | 0.9 | 0.9 | 0.9 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)